EXPRESS MAILING CERTIFICATE

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Laird et al.

Serial No.:

10/016,505

Filed:

December 10, 2001

For:

PROCESS FOR HIGH THROUGHPUT DNA METHYLATION

ANALYSIS

Art Unit:

1634

Examiner:

Jeanine Anne Goldberg

Docket No.:

47675-62

Date:

July 13, 2004

Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to the requirements in 37 C.F.R. § 1.56, and in conformance with 37 C.F.R. 1.97 and 1.98, Applicants hereby submit an Information Disclosure Statement. Applicants respectfully request that the Examiner: (1) consider the following documents during the course of his or her examination of the above-identified patent application, and (2) list the following documents in the References Cited section of any patent that may issue from the above-identified patent application.

Applicant cites 21 references listed on the attached form PTO-1449. The order of these

references should not be construed to suggest their relative pertinence. The Examiner is

encouraged to review the entire disclosure of each reference in order to draw his or her own

conclusions concerning the pertinence of the references to the claimed subject matter of this

application. The filing of this Information Disclosure Statement should not be construed to

suggest that a patentability search has been made or that the cited references are prior art or are

considered to be material to patentability.

These documents came to the attention of the Applicants through an International Search

Report issued in a related foreign application. A copy of this Search Report is included.

Applicants respectfully request consideration of the foregoing documents during

examination of the above-identified patent application. Applicants have enclosed a completed

Information Disclosure Statement by Applicant and copies of the non-US patent and non patent

literature documents.

Respectfully submitted,

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

of 3

(Use as many sheets as necessary)

Sheet

Complete if Known			
Application Number 10/016,505			
Filing Date	December 10, 2001		
First Named Inventor	Laird		
Art Unit	1634		
Examiner Name	Jeanine Anne Goldberg		
Attorney Docket Number 47675-62			

	U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. 1	Document Number Number-Kind Code ^{2 (if known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	US1	US-5,876,930	03-02-1999	Flood et al.		
	US2	US-5,804,375	09-08-1998	Gelfand et al.		
	US3	US-5,736,333	04-07-1998	McBride et al.		
	US4	US-5,866,336	02-02-1999	Nazarenko et al.		
	US5	US-5,210,015	05-11-1993	Gelfand et al.		
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	Cite	Foreign Patent Document	Publication	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	Тт
Initials*	No.1	Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Date MM-DD-YYYY			Ľ
	F1	WO 9746705	12-11-1997	Univ Johns Hopkins Med		

Examiner	Date	
Signature	Considered	

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to compete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Jeanine Anne Goldberg

47675-62

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Complete if Known

10/016,505

Filing Date December 10, 2001

First Named Inventor Laird

Art Unit 1634

Examiner Name

Attorney Docket Number

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of

Sheet

		NON PATENT LITERATURE DOCUMENTS		
Examiner Cite No. 1		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
	01	HERMAN, J.G. et al., Methylation-specific PCR: A novel PCR Assay for Methylation Status of CPG Islands, Proc. Natl. Acad. Sci, 93:9821-9826, 1996		
	O2	ZESCHNIGK, M. et al., A single-tube PCR test for the diagnosis of Angelman and Prader-Willi Syndrome based on allelic methylation differences at the SNRPN locus, Eur. J. Human Genet. 5:94-98, 1997		
	О3	KUBOTA, T. et al., A new assay for the analysis of X-chromosome inactivation based on methylation-specific PCR, Human Genet. 104:49-55, 1999		
	O4	BERNARD, P.S. et al., Homogeneous multiplex genotyping of hemochromatosis mutations with fluorescent hybridization probes, Am. J. Pathol. 153:1055-1061, 1998		
	O5	LEE, L.G. et al., Allelic Discrimination BZ nick-translation PCR with fluorogenic probes, Nucl. Acids. Res. 21:3761-3766, 1993		
	O6	HEID, C.A. et al., Real time quantitative PCR, Genome Research, Cold Spring Harbor Laboratory Press 6:986-994, 1996		
	O7	GIBSON, U.E.M. et al., A novel method for real time quantitative RT-PCR, Genome Research, Cold Spring Harbor Laboratory Press 6:995-1001, 1996		
	O8	LIVAK, K.J. et al., Oligonucleotides with fluorescent dyes at opposite ends provide a quenched probe system useful for detecting PCR product and nucleic acid hybridization, PCR Methods and Applications, 4:357-362, 1995		
	O9	SWAN, David C. et al., A sensitive type-specific, fluorogenic probe assay for detection of human papillomavirus DNA, J. Clin. Microbiol. 35:886-891, 1997		
	O10	TYAGI, S. et al., Multicolor molecular beacons for allele discrimination, Nature Biotechnology, 16:49-53, 1998		

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A LEW SE	O11	FROMMER, M. et al., A genomic sequencing protocol that yields a positive display of 5-methylcytosine residues in individual DNA strands, Proc. Natl. Acad. Sci. 89:1827-1831, 1992	-
	012	REIN et al., Identifying 5-methylcytosine and related modifications in DNA genomes, Nucl. Acids Res. 26:2255-2264, 1998	
	013	HOLLAND, P.M. et al., Detection of specific polymerase chain reaction product by utilizing the 5' →3' exonuclease activity of <i>thermus aquaticus</i> DNA polymerase, Proc. Natl. Acad. Sci. 88:7276-7280, 1991	
	O14	NAZARENKO et al., A closed tube format for amplification and detection of DNA based energy transfer, Nucl. Acids. Res. 25:2516-2521, 1997	
	O15	TYAGI, S. et al., Molecular Beacons: Probes that fluoresce upon hybridization, Nature Biotechnology 14:303-308, 1996	

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformation with MPEP 609. Draw line through citation if not in conformation and not considered. Include copy of this form with next communication to applicant.

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